

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE: Continuation of Continuation of
Reissue Application, U.S. Serial No.
08/880,748, Filed: 6-23-97,
a Continuation of Reissue Application,
U.S. Serial No. 08/369,910, Filed: 1-9-95
of Dillis V. Allen
INVENTOR: Dillis V. Allen
PATENT NO: 5,301,941
ISSUED: April 12, 1994
FOR: IMPROVED GOLF CLUB HEAD WITH INCREASED
RADIUS OF GYRATION AND FACE REINFORCEMENT

REISSUE CONTINUATION
SERIAL NO: 09/378,131
FILED: 8-20-99
EXAMINER:
ART UNIT:

U.S. Commissioner of Patents
and Trademarks
Washington, D.C. 20231

[57]

ABSTRACT

An improved high impact metal clubhead with a unique reinforced composite face wall, increased radius of gyration, and a positive lift air foil surface contour. The composite face wall includes an impact supporting wall rigidified by a pattern of integrally cast reinforcing bars that extend forwardly, rather than rearwardly, from the supporting wall. The reinforced supporting wall is covered by a very hard plastic ball striking insert that is cast in situ over the supporting wall. The increase in radius of gyration is accomplished by extending the heel and toe portions of the clubhead along the face wall further from the geometric center of the head, beyond present day parameters for high impact clubheads. And the positive lift is effected by contouring the top wall of the clubhead downwardly and rearwardly from the base wall more severely almost to the plane of the sole plate, and flattening the rear wall so it is almost co-planar with the sole plate. This configuration results in the top wall being equal to or greater in length than the combined length of the sole plate and rear wall in a vertical plane extending through the clubhead along the target line. The laws of continuity of matter and the air foil shape of the top wall eliminate the negative lift or drag in today's "woods" and offer the possibility of some positive lift to increase ball overspin.